

IN THE CLAIMS

Please amend the claims as indicated by status and revisions marks:

1. (CURRENTLY AMENDED) A method comprising:
controlling a variable power supply to supply power to an electronic device at different supply levels; and
dynamically controlling a value of ~~one or more~~ at least one power supply controller parameter ~~parameters~~ in controlling the variable power supply to supply power to the electronic device, ~~wherein the~~ at least one controller parameter corresponds to at least one of a control system loop filter compensator setting, a digital-to-analog converter setting, and an analog-to-digital converter setting.
2. (CURRENTLY AMENDED) The method of claim 1, wherein the dynamically controlling comprises controlling a value of one or more power supply controller parameters based on ~~one or more operating parameters~~ at least one operating parameter of the electronic device.
3. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a current supply level of power supplied by the variable power supply.
4. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of the at least one ~~one or more~~ power supply controller parameter ~~parameters~~ based on a current one of a plurality of operation states of the electronic device.

5. (ORIGINAL) The method of claim 4, wherein the electronic device comprises subscriber line interface circuitry and has at least an off-hook operation state, an on-hook operation state, and a ringing operation state.

6. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of the at least one ~~one or more~~ power supply controller parameter ~~parameters~~ based on a current supply level range.

7. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of the at least one ~~one or more~~ power supply controller parameter ~~parameters~~ based on a target supply level of power to be supplied by the variable power supply.

8. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a target one of a plurality of operation states of the electronic device.

9. (CURRENTLY AMENDED) The method of claim 2, wherein the dynamically controlling comprises controlling the value of ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a target supply level range.

10. (CANCELED)

11. (CURRENTLY AMENDED) The method of claim 1, wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter and wherein the controlling the variable power supply comprises generating ~~one~~

~~or more control signals~~ at least one control signal to control the DC-DC converter.

12. (CURRENTLY AMENDED) An electronic device comprising:

a supply level controller coupled to control a variable power supply to supply power to the electronic device at different supply levels; and

a controller parameter(s) controller coupled to dynamically control ~~one or more~~ at least one power supply controller parameter ~~parameters~~ for the supply level controller ~~dynamically~~ as the supply level controller controls the variable power supply to supply power to the electronic device, wherein the at least one controller parameter corresponds to at least one of a control system loop filter compensator setting, a digital-to-analog converter setting, and an analog-to-digital converter setting.

13. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on one or more operating parameters of the electronic device.

14. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a current supply level of power supplied by the variable power supply.

15. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a current one of a plurality of operation states of the electronic device.

16. (ORIGINAL) The electronic device of claim 15, wherein the electronic device comprises subscriber line interface circuitry and has at least an off-hook operation state, an on-hook operation state, and a ringing operation state.

17. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a current supply level range.

18. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a target supply level of power to be supplied by the variable power supply.

19. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a target one of a plurality of operation states of the electronic device.

20. (CURRENTLY AMENDED) The electronic device of claim 13, wherein the controller parameter(s) controller comprises circuitry to control ~~one or more~~ the at least one power supply controller parameter ~~parameters~~ based on a target supply level range.

21. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the supply level controller comprises a modulator and wherein the controller parameter(s) controller comprises circuitry to control ~~one or more settings for the modulator~~ a modulator setting.

22. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the supply level controller comprises a loop filter and wherein the controller parameter(s) controller comprises circuitry to control ~~one or more compensator settings for the loop filter~~ at least one loop filter compensator setting.

23. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the supply level controller comprises an analog-to-digital converter (ADC) and wherein the controller parameter(s) controller comprises circuitry to control ~~one or more settings~~ at least one analog-to-digital setting for the ADC.

24. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the supply level controller comprises a digital-to-analog converter (DAC) and wherein the controller parameter(s) controller comprises circuitry to control ~~one or more settings~~ at least one digital-to-analog setting for the DAC.

25. (CURRENTLY AMENDED) The electronic device of claim 12, wherein the variable power supply comprises a direct-current to direct-current (DC-DC) converter ~~and wherein the supply level controller is to generate one or more control signals to control the DC-DC converter~~.

26. (CANCELED)

27. (CURRENTLY AMENDED) An apparatus comprising:

means for controlling a variable power supply to supply power to an electronic device at different supply levels; and

means for dynamically controlling a value of ~~one or more~~ at least one power supply controller ~~parameters~~ parameter as the variable power supply is controlled, wherein the at least one controller parameter corresponds to at least

one of a control system loop filter compensator setting, a digital-to-analog converter setting, and an analog-to-digital converter setting.

28. (CURRENTLY AMENDED) The apparatus of claim 27, comprising means for performing ~~one or more BORSCHT functions~~ at least one BORSCHT function.